3.3.4.1 Algific Talus Slope

3.3.4.1.1 Community Overview

This rare community is known only from the southwestern corner of Wisconsin's Driftless Area. Algific talus slopes are small and isolated and tend to occur on steep north- or east-facing slopes with a substrate of fractured limestone (dolomite) bedrock that retains ice and emits cold air throughout the growing season. The community is dependent on water entering gaps in the dolomite, freezing in winter, and then slowly melting during the summer months and producing a steady outflow of cold air. Cold microhabitats support and enable the persistence of disjunct northern plant species, and "periglacial relicts" such as northern monkshood and globally rare terrestrial snails. The woody overstory is often sparse, composed of scattered, small black ash and white birch. Mountain maple, a northern shrub, may be frequent, and extensive beds of bulblet fern and mosses are characteristic herbs.

3.3.4.1.2 Vertebrate Species of Greatest Conservation Need Associated with Algific Talus Slope

There were not any vertebrate Species of Greatest Conservation Need that were identified as moderately or significantly associated with algific talus slopes.

3.3.4.1.3 Threats and Priority Conservation Actions for Algific Talus Slope

All known occurrences of algific talus slope are in the Western Coulee and Ridges Ecological Landscape in western Grant County and are within a few miles of the Mississippi River. As a result, the Western Coulee and Ridges Ecological Landscape represents a major opportunity for protection, management, and/or restoration of algific talus slope.

The largest, most diverse sites remain in private ownership. Because of the fragility of the type and out of respect to landowners' wishes, public visitation is not recommended or encouraged at this time. Though past searches for algific talus slopes have been quite rigorous (e.g., over 95 sites were examined in Grant County alone in 1985), it is possible that additional occurrences of this community could exist in areas that have not yet been surveyed.

The following list of threats and priority conservation actions were identified for algific talus slope in Wisconsin.

Threats and Issues

- Loss of forest cover can result in desiccation, as well as the loss of leaf litter that is required by the snails as a food source.
- Excessive trampling can harm sensitive vegetation and animal life and can affect water infiltration by compacting the substrate.
- Physical damage to the surface can occur due to quarrying, and less intense disturbances such as passage by livestock, vehicles, or even humans travelling on foot.
- Altered hydrology can result from road construction, quarrying, or building structures above the slopes.
- The impacts of invasive species are unknown and don't appear to be major at this time, but a monitoring program is necessary to periodically check for the presence of invasives.

Priority Conservation Actions

- Ensure the maintenance of hydrologic function and carefully consider management of the lands around the algific talus slope.

- Protective actions need to include not only the areas from which cold air flows to the surface, but also those areas up slope that permit the infiltration of water that freezes in bedrock fissures and cavities during winter.